NOAA Data Management Integration Team

Terms of Reference - Version 0

The NOAA Data Management Integration Team (DMIT) will provide advice, expertise and will contribute to actions needed to integrate data management within NOAA and IOOS. The team should include representation from all of the NOAA Line Offices and Goals and be selected to represent a broad range of NOAA-relevant classes of data and concerns (e.g. satellite observations, in-situ observations, models, real-time and delayed mode).

Membership in DMIT will entail a substantial commitment. Team members will remain with their respective organizations but should expect to dedicate half their time to DMIT activities.

DMIT may establish sub-teams to carry out its responsibilities. These sub-teams may include DMIT members with additional volunteers and invited experts as needed.

It is anticipated that the team will, for the most part, conduct business through video and/or teleconferences, although occasional face to face meetings will likely be necessary.

Specifically, the team will work with the GEO-IDE Project Manager to:

1. Implement a strategy to bring NOAA data managers together as communities. The goals of these communities are to foster communication between NOAA data managers who share data management needs and for whom similar data management solutions apply; and to provide advice and review of DMC draft plans. Over the next year, this will include conducting a series of GEO-IDE Standards Outreach Workshops.

2. Provide advice and expertise to the Data Management Committee on obstacles to NOAA data integration and propose approaches to take toward solutions.

3. Review Interoperability Plans for IOOS Projects with respect to how they contribute to GEO-IDE and integrated data management in NOAA. Provide feedback and advice on these plans to the IOOS Program Office.

4. Oversee implementation and operation of the GEO-IDE standards process. The process will provide formal designation as ?NOAA standard? for relevant, high-quality standards and protocols that have demonstrated success at promoting interoperability and have a defined role in the NOAA data management architecture. Implementation will include: a) establishing and implementing an outreach process to publicize the standards process throughout NOAA and seek input on changes needed, b) submitting an initial set of existing/emerging standards and protocols for fast-track evaluation as possible NOAA data management standards, c) when needed define processes to adapt standards to NOAA requirements.

5. Develop and coordinate implementation of a NOAA-wide Service Oriented Architecture Management Plan. Implementation will consist of web service development activities including prototyping, testing and integration. The development of an SOA Management Plan for GEO-IDE must be forged by and responsive to the NOAA PPBES process organized around NOAA Mission Goals and associated programs.

6. Develop and implement a GEO-IDE Communications Plan. DMIT must ensure that NOAA employees at all levels understand, accept, and support the GEO-IDE vision, ethic, and principles. Development of a communication strategy and plan is crucial to the success of this program. The plan should ensure the transparency of program decisions and quick flow of information to all interested parties.

7. Develop and coordinate implementation of the GEO-IDE Training Plan. Skills and knowledge required for leading and managing cross-functional teams are significantly different from the day-to-day skills used by

most NOAA managers. In order for GEO-IDE to be successful, leaders and managers will need to focus considerable effort on learning these new skills. DMIT will evaluate courses available through the NOAA E-Learning Program for relevance to organizational change and cross-functional team development and management and recommend additional material as needed. The training plan should also cover development of technical skill relevant to Web Services and other appropriate technologies and standards.

8. Capture and share lessons learned. NOAA employees already have significant technical knowledge and skills related to tools and techniques for managing their specific implementations of important NOAA data types but they need to share that knowledge effectively and apply it across traditional boundaries. DMIT will use existing tools to support communication and coordination among the teams building integrated data management tools for NOAA.

9. Assist the GEO-IDE Project Manager in conducting an informal survey to identify software tools (commercial, government and open-source) that are applicable to major data types within NOAA. The results will be published within the NOAA Guide on Integrated Information Management.